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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

NGUYEN, THU HA T

ART UNIT	PAPER NUMBER
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2155

DATE MAILED: 07/10/2003

19

Please find below and/or attached an Office communication concerning this application or proceeding.

Handwritten signature

Office Action Summary

Application No.

09/430,691

Applicant(s)

TOIVONEN, ANTHONY

Examiner

Thu Ha T. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply.

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,7,8,10-12,14 and 20-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,7-8,10-12,14,20-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-4, 7-8, 10-12, 14, 20-23 are presented for examination.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 7-8, 10-12, 14, 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Sung et al.**, (hereinafter Sung) U.S. Patent No. **6,226,684**, in view of **Admitted Prior Art (APA)**.

4. As to claim 1, **Sung** teaches the invention as claimed, including a distributed component system in a network comprising:

a client node configured to process client activation requests (abstract, figures 1-4, 8-11, 13, col. 2 lines 15-29);

a server node configured to monitor activation requests from the client node, said node operating to enable the client node to activate remote components on available server nodes without specific names or capabilities of nodes in the network servicing the request (abstract, figures 1-4, 8-11, 13, col. 2 lines 15-29, col. 3 lines 51-col. 4 lines 49, col. 7 lines 22-col. 8 lines 13, col. 10 lines 22-42. In col. 3 lines 51-col. 5 lines 19 shown that the client node requests on the router 14, the router 14 ascertain that server

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16 is the server can service the request then routes the request to server 16. In another embodiment, client sends another request to another router 56, the router 56 selects the server 54 to communicate with client 12. At this stage, client sends a request without knowing specific names and capabilities of servers since the router has to look up the routing table to see which server is slated to service the client request prior to assigning the client to the server).

Sung does not explicitly teach said remote components comprise reusable program building blocks that are combinable with one or more other components in a distributed network to form an application. However, **APA** of instant application teaches said remote components comprise reusable program building blocks that are combinable with one or more other components in a distributed network to form an application (figure 1, page 4 lines 3-10). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention to combine the teachings of **Sung and APA** to have said remote components comprise reusable program building blocks that are combinable with one or more other components in a distributed network to form an application because it would have an efficient communications system that can reuse or share a program with other components in the network servers.

5. As to claim 2, **Sung** teaches the invention as claimed, wherein said network comprises a local-area network, a wide-area network, or Internet (figure 1).

6. As to claim 3, **Sung** teaches the invention as claimed, wherein said activation requests are processed by a client node that includes enhancements to a network protocol of the client node (abstract, figures 1-2).

7. As to claim 4, **Sung** teaches the invention as claimed, wherein said server node include enhancements to a network protocol of the server node (abstract, figures 1-2).

8. As to claim 7, **Sung** teaches the invention as claimed, including a method comprising:

receiving a machine-independent activation request from a client in a network (abstract, figures 1-4, 8-11, 13, col. 1 lines 55-col. 2 lines 29),

multicasting said activation request to the network (abstract, figures 1-4, 13, col. 2 lines 15-29, col. 5 lines 29-59),

receiving capability information from servers available to service said activation request (abstract, figures 1-4, 5A, 8-11, 13, col. 2 lines 15-30, col. 7 lines 22-col. 8 lines 13, col. 10 lines 22-42. The routing table checks the status or capabilities of server before assigning the client to the server).

Sung does not explicitly teach said activation request comprises a request to activate a reusable program building block that is combinable with one or more other components in a distributed network to form an application. However, **APA** of instant application teaches said activation request comprises a request to activate a reusable

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program building block that is combinable with one or more other components in a distributed network to form an application (figure 1, page 4 lines 3-10). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention to combine the teachings of **Sung and APA** to have a reusable program building blocks that are combinable with one or more other components in a distributed network to form an application because it would have an efficient communications system that can reuse or share a program with other components in the network servers.

9. As to claim 8, **Sung** teaches the invention as claimed, wherein the capability information includes a list of server IP addresses or UNC names of servers that have the ability to service a request for a specific CLSID (figures 6-7).

10. As to claim 10, **Sung** teaches the invention as claimed, including a method comprising:

monitoring at a server a specific port to receive a machine independent client activation request within a network (figures 7, 10, col. 9 lines 15-54, col. 11 lines 10-col.12 lines 24),

retrieving a client address from an IP packet associated with the request (figure 2, col. 4 lines 42-col. 5 lines 59),

returning capability information of the server to the client address (abstract, figures 1-4, 8-11, 13, col. 2 lines 15-30, col. 7 lines 22-col. 8 lines 13, col. 10 lines 22-

42. The routing table checks the status or capabilities of server before assigning the client to the server).

Sung does not explicitly teach said activation request comprises a request to activate a reusable program building block that is combinable with one or more other components in a distributed network to form an application. However, **APA** of instant application teaches said activation request comprises a request to activate a reusable program building block that is combinable with one or more other components in a distributed network to form an application (figure 1, page 4 lines 3-10). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention to combine the teachings of **Sung and APA** to have a reusable program building blocks that are combinable with one or more other components in a distributed network to form an application because it would have an efficient communications system that can reuse or share a program with other components in the network servers.

11. As to claim 11, **Sung** teaches the invention as claimed, wherein monitoring the specific port includes monitoring a port that is tied to a multicast IP address (figures 7, 10, col. 9 lines 15-54, col. 11 lines 10-col.12 lines 24),

12. As to claim 12, **Sung** teaches the invention as claimed, wherein returning includes returning a server IP address (figure 7, 10, col. 9 lines 15-54, col. 11 lines 10-col.12 lines 24).

13. As to claim 14, **Sung** teaches the invention as claimed, a method comprising:

receiving a machine independent activation request from a client in a network (abstract, figures 1-4, 8-11, 13, col. 1 lines 55-col. 2 lines 29),

multicasting said activation request to the network (abstract, figures 1-4, 13, col. 2 lines 15-29, col. 5 lines 29-59),

requesting capability information from servers available to service said activation request (abstract, figures 1-4, 5A, 8-11, 13, col. 2 lines 15-30, col. 7 lines 22-col. 8 lines 13, col. 10 lines 22-42. The routing table checks the status or capabilities of server before assigning the client to the server),

monitoring a port that is tied to a multicast IP address (figures 7, 10, col. 9 lines 15-54, col. 11 lines 10-col.12 lines 24),

retrieving a client address from an IP packet (figure 2, col. 4 lines 42-col. 5 lines 59),

returning capability information of the server to the client address (abstract, figures 1-4, 8-11, 13, col. 2 lines 15-30, col. 7 lines 22-col. 8 lines 13, col. 10 lines 22-42. The routing table checks the status or capabilities of server before assigning the client to the server).

Sung does not explicitly teach said activation request comprises a request to activate a reusable program building block that is combinable with one or more other components in a distributed network to form an application. However, **APA** of instant

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application teaches said activation request comprises a request to activate a reusable program building block that is combinable with one or more other components in a distributed network to form an application (figure 1, page 4 lines 3-10). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention to combine the teachings of **Sung and APA** to have a reusable program building blocks that are combinable with one or more other components in a distributed network to form an application because it would have an efficient communications system that can reuse or share a program with other components in the network servers.

14. As to claim 20, **Sung** teaches the invention as claimed, including a computer program, residing on a computer readable medium (abstract, figure 2), the program comprising executable instructions that enable the computer to:

receive a machine-independent activation request from a client in a network (abstract, figures 1-4, 8-11, 13, col. 1 lines 55-col. 2 lines 29),

multicast said activation request to the network (abstract, figures 1-4, 13, col. 2 lines 15-29, col. 5 lines 29-59),

receive capability information from servers available to service said activation request (abstract, figures 1-4, 8-11, 13, col. 2 lines 15-30, col. 7 lines 22-col. 8 lines 13, col. 10 lines 22-42. The routing table checks the status or capabilities of server before assigning the client to the server).

Sung does not explicitly teach said activation request comprises a request to activate a reusable program building block that is combinable with one or more other components in a distributed network to form an application. However, **APA** of instant application teaches said activation request comprises a request to activate a reusable program building block that is combinable with one or more other components in a distributed network to form an application (figure 1, page 4 lines 3-10). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention to combine the teachings of **Sung and APA** to have a reusable program building blocks that are combinable with one or more other components in a distributed network to form an application because it would have an efficient communications system that can reuse or share a program with other components in the network servers.

15. As to claim 21, **Sung** teaches the invention as claimed, including a computer program, residing on a computer readable medium (abstract, figure 2), the program comprising executable instructions that enable the computer to:

monitor at a server a specific port that is tied to a multicast IP address to receive a machine-independent client activation request within a network (figures 7, 10, col. 9 lines 15-54, col. 11 lines 10-col.12 lines 24),

retrieve a client address from an IP packet associated with the request (figure 2, col. 4 lines 42-col. 5 lines 59),

return capability information of the server to the client address (abstract, figures 1-4, 8-11, 13, col. 2 lines 15-30, col. 7 lines 22-col. 8 lines 13, col. 10 lines 22-42. The routing table checks the status or capabilities of server before assigning the client to the server).

Sung does not explicitly teach said activation request comprises a request to activate a reusable program building block that is combinable with one or more other components in a distributed network to form an application. However, **APA** of instant application teaches said activation request comprises a request to activate a reusable program building block that is combinable with one or more other components in a distributed network to form an application (figure 1, page 4 lines 3-10). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention to combine the teachings of **Sung and APA** to have a reusable program building blocks that are combinable with one or more other components in a distributed network to form an application because it would have an efficient communications system that can reuse or share a program with other components in the network servers.

16. As to claim 22, **Sung** teaches the invention as claimed, including a computer program, residing on a computer readable medium (abstract, figure 2), the program comprising executable instructions that enable the computer to:

receive a machine-independent activation request from a client in a network (abstract, figures 1-4, 8-11, 13, col. 1 lines 55-col. 2 lines 29),

multicast said activation request to the network (abstract, figures 1-4, 13, col. 2 lines 15-29, col. 5 lines 29-59),

request capability information from servers available to service said activation request (abstract, figures 1-4, 8-11, 13, col. 2 lines 15-30, col. 7 lines 22-col. 8 lines 13, col. 10 lines 22-42),

monitor a port that is tied to a multicast IP address (figures 7, 10, col. 9 lines 15-54, col. 11 lines 10-col.12 lines 24),

retrieve a client address from an IP packet (figure 2, col. 4 lines 42-col. 5 lines 59),

return capability information of the server to the client address (abstract, figures 1-4, 8-11, 13, col. 2 lines 15-30, col. 7 lines 22-col. 8 lines 13, col. 10 lines 22-42. The routing table checks the status or capabilities of server before assigning the client to the server).

Sung does not explicitly teach said activation request comprises a request to activate a reusable program building block that is combinable with one or more other components in a distributed network to form an application. However, **APA** of instant application teaches said activation request comprises a request to activate a reusable program building block that is combinable with one or more other components in a distributed network to form an application (figure 1, page 4 lines 3-10). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention to combine the teachings of **Sung and APA** to have a reusable program building blocks that are combinable with one or more other components in a distributed

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network to form an application because it would have an efficient communications system that can reuse or share a program with other components in the network servers.

17. As to claim 23, **Sung** teaches the invention as claimed, including a distributed component network comprising: client nodes configured to be able to request activation of remote components at run-time without specific names or capabilities of nodes servicing those requests (abstract, figures 1-4, 8-11, 13, col. 2 lines 15-29, col. 3 lines 51-col. 4 lines 49); and server nodes operating to monitor the requests and respond appropriately to service the requests (abstract, figures 1-4, 8-11, 13, col. 2 lines 15-30, col. 7 lines 22-col. 8 lines 13, col. 10 lines 22-42).

Sung does not explicitly teach said remote components comprise reusable program building blocks that are combinable with one or more other components in a distributed network to form an application. However, **APA** of instant application teaches said remote components comprise reusable program building blocks that are combinable with one or more other components in a distributed network to form an application (figure 1, page 4 lines 3-10). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention to combine the teachings of **Sung and APA** to have said remote components comprise reusable program building blocks that are combinable with one or more other components in a distributed network to form an application because it would have an efficient communications system that can reuse or share a program with other components in the network servers.

Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thu Ha Nguyen, whose telephone number is (703) 305-7447. The examiner can normally be reached Monday through Friday from 8:00 AM to 5:00 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, SPE Hosain T. Alam, can be reached at (703) 308-6662.

Any inquiry of a general nature of relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-9600.

The fax number for art unit 2155 is (703) 746-7239.

Thu Ha Nguyen

July 1, 2003


HOSAIN T. ALAM
PRIMARY EXAMINER